ABSTRACT

A method for determining a location of a digital radio transmitter includes detecting, by at least three spatially separated receivers, a digitally encoded radio signal, having a known pattern of bit transitions, radiated from the transmitter. Once detected, a time of arrival of the bit transitions at each of the receivers is determined. Then, an indication of the time of arrival at each respective receiver for the bit transitions is transmitted from each of the receivers to a central processor. At the central processor, time of arrival differences of common bit transitions among the receivers are determined. Based on the time of arrival differences, the central processor may calculate the location of the transmitter.